BRUHAT BANGALORE MAHANAGARA PALIKE

Name of work: Detailed estimate for Rain water Harvesting

Job No.: 018-11-000109 Total Estimate cost for RWH Rs. **100000.00**

Sl No	Description	No.	L	B	D	Qty	Rate	Unit	Amount
A	**Construction of infiltration well**								
1	Earthwork excavation in hard murrum, boulders, hard Katak including shoring, strutting, barricadin, danger lighting, bailing out water wherever necessary, with stacking the materials as directed upto a lead of 50 mtr & lift of 1.50 mtr etc., complete. (PRED Bangalore Circle P-32, I-8.2)								
	0-1.5 mtrs	3.142	2.50 4.00	2.50	1.50	**7.36**	167.00	Cmt	1,229.00
	1.5-3.0 mtrs	3.142	2.50 4.00	2.50	1.50	**7.36**	201.00	Cmt	1,479.00
	3.0-4.5 mtrs	3.142	2.50 4.00	2.50	1.50	**7.36**	235.00	Cmt	1,730.00
	Over burden earth	1	71.00	0.80	0.35	19.88			
						19.88	167.00	Cmt	3,320.00
2	Supplying and erection of R.C.C. rings for well steining of 0.3 M depth using M-20 grade cement concrete using clean graded granite or trap or jelly of approved quality 20 mm and down size well compacted including centering, from work and plastering for both faces with CM 1:3 proportion as per design using 6.50 mm M.S. Coil at the rate of 10 KGs/ring including cost of steel and fabrication, bailing out of water, errection etc., iii) For 1.20 M dia (clear) rings of steining thickness 0.0775 mm upto 18 M depth. PRED Bangalore Circle P-36, I-8.8a iii)					**15.00**	882.00	No.	13,230.00
3	Providing and filling with boulders or rubble of approved size and quality, including hand packing, wedging, filling in voids with quarry spalls and clean sand etc., complete with all lead and lifts etc., complete PRED Bangalore Circle P-35, I-8.9								
	0-4.5 mtrs	3.142	2.50 4.00	2.50	4.50	**22.09**			
	Deduct	3.142	1.30 4.00	1.30	4.50	**5.97**			
						16.12	757.00	Cmt	12,203.00

4	Providing and laying in position reinforced cement concrete of nominal mix 1:1:2 with 20 mm and down size graded granite metal machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for R.C.C. beams, columns of all sizes in foundation plinth and superstructure ground floor level for roof slabs, staircase, lintes, columns, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. (excluding cost of steel, fabrication & plastering) Specification No.KBS 4.1, 4.6 (P-13, I-4.16) PWD Bangalore Circle								
	for covering slab	3.14 / 4	1.20	1.20	0.10	0.11	5598.92	Cmt	616.00
5	Providing TMT steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position lapping and / or welding whever requried, tying with binding wire and anchoring to the adjoining members whever necessary complee as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No.KBS 4.6.3 (P-16, I-4.46) PWD Bangalore Circle.								
	for covering slab					5.50			
	grating					45.00			
						50.50	51.08	kg	2,580.00
6	Conveying the excavated earth with a lead of 0 to 10 kms with all lead and lifts etc.,								
	Qty as per item no 1					41.96			
						41.12	112.00	Cmt	4,605.00
	TOTAL A								**40992.00**
B	**Construction of Infilteration Chamber**								
1	Earthwork excavation for foundation of buildigns, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth includign dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m specification. No.KBS 2.1 (b) / 2.3.5 (PWD SR P-5, I-2.4)								
		1	1.35	1.35	0.80	1.46			
						1.46	194.40	Cmt	284.00
2	Providing and laying in position plain cement concrete of mix 1:3:6 using 20mm and down size graded granite metal, machine mixed, concrete laid in layers not excedding 15 cms thick, well compacted, in foundation and plinth, including cost of all material, labour, HOM of machinery, curing complete as per specification. (P-12, It no. 4.7)								
		1	1.35	1.35	0.15	0.27			
						0.27	3790.80	Cmt	1,024.00

3	KSRB 6-2.2: Providign and constructing burnt brick masonry with approved quality of non-modular bricks of standard size of class designation 50 (table moulded) with cement mortar 1:4 for basement & super structure including cost of materials, labour charges, scaffolding, curing complete as per specificaitons. Specification No. KBS 6.2 (P-26, I-6.7)								
		2	1.35	0.23	0.60	0.37			
		2	0.90	0.23	0.60	0.25			
						0.62	4340.52	Cmt	2,691.00
4	KSRB 15-3.7: Providing 18 mm thick cement plaster in single coat with cement mortar 1:3, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, incluidng cost of mateials, labour, curing complete as per specificaitons (P-97, I-15.15)								
		4	0.90		0.60	2.16			
						2.16	164.16	Cmt	355.00
5	Providing and laying in position plain cement concrete of mix 1:2:4 using 20mm and down size graded granite metal, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications (P-12, It no. 4.6)								
		2	1.35	0.23	0.10	0.06			
		2	0.90	0.23	0.10	0.04			
						0.10	4388.04	Cmt	439.00
6	KSRB 4-1.1: Providing and layign in position plain cement concrete of nominal mix 1:5:10 using 40 mm and down size graded granite metal machine mixed, concrete laid inlayers not exceeding 15 cms. thck, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specificaitons. Specification No. KBS 4.1. 4.2 (								
		1	1.35	1.35	0.15	0.27			
						0.27	4902.12	Cmt	1,324.00
7	Providing TMT steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position lapping and / or welding whever requried, tying with binding wire and anchoring to the adjoining members whever necessary complee as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No.KBS 4.6.3 (P-16, I-4.46) PWD Bangalore Circle.								
	100 kg per cmtr, 27 kg = 2.7 qtl					22.00			
						22.00	51.08	kg	1,124.00

8	KSRB 13-8.1: Providing and fixing to wall, ceiling and floor, low density polyethylene pipes 6.00 kgf/sq.cm workign pressure 110mm outside diameter with speical flange, compression type fittings, wall clips, making good the wall, ceilign and floor including cost of all materials, labour charges, HOM of equipments and testing complete as per specificaitons. Specificaiton No. KBS 13.2 15.1/13.9 (P83, I-13.70.4)								
		1	3.00			3.00			
						3.00	475.20	Rmt	1,426.00
9	Providing 0.32 cms to 10 cms (1/8 inch to 4 inch) size grade filter media including laying, grading and hand packign in position as per specificaiton etc., complete.								
		1	0.90	0.90	0.15	0.12			
						0.12	1278.72	Cmt	153.00
10	Conveying the excavated earth with a lead of 0 to 10 kms with all lead and lifts etc.,								
	Qty as per item no 1					1.46			
						1.46	112.00	Cmt	164.00
	TOTAL B								**8,984.00**
	TOTAL A+B								**49,976.00**
	Miscellaneous								24.00
	GRAND TOTAL FOR RAINWATER HARVESTING - 1 NO								**50,000.00**
	GRAND TOTAL FOR RAINWATER HARVESTING - 2 NO								**100,000.00**

Certificate:

1. The work spot has been inspected and found to be necessary
2. The work spot comes under BBMP Limits
3. The provisions made in the estimate are necessary and minimum
4. The estimate is based on CSR of 2010-11

Assistant Engineer

Assistant Executive Engineer (Project - East)

EXECUTIVE ENGINEER (PROJECT) EAST
Bruhat Bangalore Mahanagara Palike.

Administrative sanction for Rs 1.00/-
(Rs One lakhs only
is accorded under head P.o 311
(Technology 1344)
Registered as Dc Sl No. 102 Page No. 15
Subject to conditions contained in enclosed memo
No. EE(C)E(AE)102/11-12 Dt 4/7/11

Technically sanctioned for Rs : 1.00/-
(Rs. : One lakhs only
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